



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,764	10/20/2003	Byung-Ryul Ryoo	1293.1910	8966

21171 7590 11/24/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

GOMA, TAWFIK A

ART UNIT PAPER NUMBER

2627

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/687,764	RYOO ET AL.	
	Examiner	Art Unit	
	Tawfik Goma	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on 9/12/2006.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rearrangement of the elements claimed in claims 9, 10 and 12 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 8 and 11 rejected under 35 U.S.C. 102(b) as being anticipated by Komma et al (US 5644413), herein Komma.

Regarding claim 1, Komma discloses an optical pickup apparatus comprising: a light source which emits laser light (45, fig. 19); a beam splitter which changes the travel path of incident light (48, fig. 19); an objective lens which condenses light passed through the beam splitter to form a light spot on an optical recording medium (50, fig. 19); and a photo detector which receives light reflected from the optical recording medium and then passed through the beam splitter to detect an information signal and an error signal (53, fig. 19), wherein the optical pickup apparatus further comprises a grating which diffraction-transmits incident light (94, fig. 20), a wavelength plate which changes polarization characteristic of incident light (95, fig. 20), and an optical output compensating lens which compensates output of light incident from the light source (100, fig. 20), all of which being disposed on an optical path between the light source and the beam splitter (99, fig. 19), wherein at least two of the grating, the wavelength plate, and the optical output compensating lens are formed in one body (99, figs. 19 and 20).

Regarding claim 2, Komma further discloses wherein the grating is formed on

Art Unit: 2627

an optical incident surface and/or an optical emitting surface of the wavelength plate, so that the grating and the wavelength plate are formed in one body (99, fig.19).

Regarding claim 3, Komma further discloses wherein the wavelength plate, which is formed in one body with the grating, is bonded to the optical output compensating lens (99, fig. 20).

Regarding claim 4, Komma further discloses wherein the grating is formed on an optical incident surface and/or an optical emitting surface of the optical output compensating lens, so that the grating and the optical output compensating lens are formed in one body (94, 100, 99, fig.20).

Regarding claim 5, Komma further discloses wherein the wavelength plate and the optical output compensating lens are bonded to each other (95, 100, fig. 20).

Regarding claim 7, Komma further discloses wherein the grating is formed on an optical incident surface of the wavelength plate, so that the grating and the wavelength plate are formed in one body (94, 95, fig. 20).

Regarding claim 8, Komma further discloses wherein the wavelength plate, which is formed in one body with the grating, is bonded to the optical output compensating lens (95, 100, fig. 20).

Regarding claim 11, Komma further discloses wherein the grating is formed on an optical incident surface of the optical output compensating lens, so that the grating and the optical output compensating lens are formed in one body (94, 100, fig. 20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komma et al (5644413) in view of Park et al (US 2003/0053394).

Regarding claims 6 and 13-16, Komma discloses everything claimed as applied above (see claims 1-5). Komma fails to disclose a holder in which the light source is fixed; and a cylinder, in which at least two of the grating, the wavelength plate, and the optical output compensating lens are fixed and which is movable in an optical axis direction with respect to the holder and is installed rotatably, wherein a position of the cylinder is adjustable in the optical axis direction and a rotation direction with respect to the holder. In the same field of endeavor, Park discloses a cylinder (70, fig. 10) supporting optical elements including a grating (45, fig. 10) and which is capable of supporting the elements to be rotatable about an optical axis and adjustable in an optical axis direction (pars. 63 and 64). It would have been obvious to one of ordinary skill in the art to modify the optical pickup disclosed by Komma by providing for a cylinder for rotating and moving the optical element as taught by Park. The rationale is as follows: One of ordinary skill in art at the time of the applicant's invention would have been motivated to provide the rotatable and movable support in order to adjust

Art Unit: 2627

parameters of an optical axis for a multiple types of disks used with the single pickup (see Park, par. 70).

Claims 9, 10 and 12 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Komma et al (US 5644413).

The rejections to claims 9, 10 and 12 are made in view of the drawing objection above.

Regarding claims 9, 10 and 12 Komma discloses all of the components of the optical element and their alternative arrangement as applied above (see claims 1-5, 7, 8 and 11). Claims 9, 10 and 12 are directed to a rearrangement of the optical elements disclosed by Komma. It would have been obvious to one of ordinary skill in the art to modify the optical element disclosed by Komma by rearranging the optical elements. The claims are deemed an obvious rearrangement that does not change the scope of the overall invention (see MPEP 2144.04 Paragraph VI (C)).

In re JAPIKSE
(CCPA)

86 USPQ 70

Decided May 9, 1950

Appl. No. 5634

U.S. Court of Customs and Patent Appeals

In the brief of the Solicitor for the Patent Office it is pointed out that the claim reads on Cannon except as to the final limitation reading "means disposed in alignment with said opening for contact by said depending means to start the pressing operation of said hydraulic press." As to that limitation it was held that there would be no invention in shifting the starting switch disclosed by Cannon to a different position since the operation of the device would not thereby be modified.

Response to Arguments

Applicant's arguments filed 9/12/2006 have been fully considered but they are not persuasive.

Regarding applicant's arguments with respect to the drawing objection, applicant's arguments are not persuasive because although figures 3 and 5 show the elements claimed by applicant in claims 9, 10 and 12, they fail to show the arrangement claimed. More particularly, Figure 5 fails to show wherein the grating is formed on a optical *emitting* surface of the wavelength plate as claimed in claims 9 and dependant claim 10. Figure 3 fails to show wherein the grating is formed on an optical *emitting* surface of the compensating lens as claimed in claim 12. Figures 3 and 5 show wherein the grating is formed on an optical incident surface of the compensating lens and the wavelength plate respectively. 37 C.F.R. 1.83 (a) requires that: The drawings must show every feature of the invention specified in the claims. Applicant's allegation that the claims are not limited to what is disclosed in the specification and the drawings is unfounded and contradictory at least to the 37 C.F.R. 1.83 (a) requirement.

Regarding applicant's arguments with respect to the 102 (b) rejection of claims 1-5, 7, 8 and 11, applicant's arguments are not persuasive. Claim 1 recites the limitation "a grating which diffraction-transmits incident light." Applicant agrees that Komma discloses wherein the grating diffraction transmits a first polarized light and that the second polarized light is transmitted by the grating without diffraction. The first polarized light is incident light, and as such, Komma's grating diffraction transmits

Art Unit: 2627

incident light. The claim does not recite that all incident light is diffracted during transmission by the grating, it merely discloses that incident light is diffracted during transmission and as such, Komma's grating reads on the claimed limitation.

Regarding applicant's with respect to the 103 (a) rejection of claims 6 and 13-16, applicant's arguments are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the present case, Komma discloses all of the optical elements claimed by applicant but only fails to disclose a holder with a movable cylinder for holding the optical elements. Park discloses the holder and the cylinder which are movable as claimed. The combination of the references disclose everything claimed. Although Park does not teach wherein the cylinder holds two of the grating, the wavelength plate and the optical compensating lens, Komma's disclosure of a unified body for these elements (fig. 20) makes the combination of Komma and Park read on the claimed invention. Park's cylinder holds a grating lens (45, fig. 10) and Komma discloses wherein a grating can be formed in a single body with both a wavelength plate and a compensating lens.


Conclusion

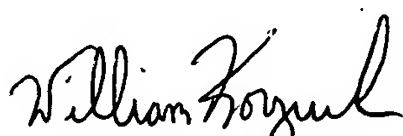
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

Art Unit: 2627

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


T. Goma
11/17/2006


WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600